

AMENDMENTS TO THE CLAIMS

This listing of claims replaces all prior versions, and listings, of claims in the application:
What is claimed is:

1. (Currently amended) A system useful for storing a television program P, comprising:

a PVR having a housing, a first memory, a network interface device, and logic configured to copy at least a first portion of the television program P into said first memory, wherein said first memory and said network interface device are disposed within said housing;

a network communicatively connected to said network interface device and to a plurality of devices external to said housing;

a personal computer connected to the network;

a second memory disposed outside of said housing and is in communication with the PVR via the network interface device;

virtual storage management (VSM) logic configured to track the location of the second memory on the network, and to store a second portion of the program P in the second memory;

wherein the VSM logic is configured to track one or more logical addresses of the second memory on the network ~~[[fro]]~~ for storing a plurality of portions of the program P including said portion, to track the total amount of memory storage on the network that is available for storing at least one of said first or said second portion of said television program P, and to track the memory locations of a plurality of portions P(i) of the program P; and

wherein said plurality of devices external to said housing includes said personal computer and said second memory.

2. (Cancelled).

3. (Cancelled).

4. (Original) A system in accordance with claim 1, wherein the VSM logic is configured to perform at least one of:

(a) track which memory devices on the network are currently active in recording or playback;

- (b) track which disks on the network are on-line and off-line;
- (c) track the memory locations of previously stored programs;
- (d) inform the user when a memory device holding at least a part of a program is off-line;
- (e) request the user to bring on-line a memory device that is off-line;
- (f) inform a user before the total available on-line memory runs out;
- (g) allow the user to set a memory lower limit for the VSM logic to inform the user prior to running out of memory; and
- (h) after informing the user of the memory lower limit condition, further provide the user of the option to erase previously stored programs in real time.

5. (Original) A system in accordance with claim 1, further comprising:

- an archival memory device in communication with the PVR; and
- archival storage management (ASM) logic configured to store the program P on the archival memory device.

6. (Currently amended) A system in accordance with claim ~~[[6]]~~ 5, wherein the archival memory device comprises a DVD-R device.

7. (Previously presented) A system in accordance with claim 1, wherein the first memory and the second memory each comprise a hard disk drive, and wherein both the first and the second portion are retrieved to the PVR for playback.

8. (Currently amended) A system useful for storing a television program P, comprising:

- a PVR having a housing, a first memory, a network interface device, and means for copying at least a first portion of the television program P into said first memory, wherein said first memory and said network interface device are disposed within said housing;
- a network communicatively connected to said network interface device and to other devices external to said housing;
- a personal computer connected to the network;
- a second memory disposed external to said housing and is in communication with the PVR via the network interface device;

virtual storage management (VSM) means for tracking the location of the second memory on the network, and storing a second portion of the program P in the second memory;

wherein the VSM means is configured as part of the PVR to track one or more logical addresses of the second memory on the network for storing a plurality of portions of the program P including said portion, to track the total amount of memory storage on the network that is available for storing at least one of said first or said second portion of said television program P, and to track the memory locations of a plurality of portions P(i) of the program P; and

wherein said other devices external to said housing includes said personal computer and said second memory.

9. (Cancelled).

10. (Cancelled).

11. (Original) A system in accordance with claim 8, wherein the VSM means is for at least one of:

(a) tracking which memory devices on the network are currently active in recording or playback;

(b) tracking which disks on the network are on-line and off-line;

(c) tracking the memory locations of previously stored programs;

(d) informing the user when a memory device holding at least a part of a program is offline;

and

(e) requesting the user to bring on-line a memory device that is off-line;

(f) informing a user before the total available on-line memory runs out;

(g) allowing the user to set a memory lower limit for the VSM logic to inform the user prior to running out of memory; and

(h) after informing the user of the memory lower limit condition, further providing the user of the option to erase previously stored programs in real time.

12. (Original) A system in accordance with claim 8, further comprising:

an archival memory device in communication with the PVR; and

archival storage management (ASM) means for storing the program P on the archival memory device.

13. (Original) A system in accordance with claim 12, wherein the archival memory device comprises a DVD-R device.

14. (Previously presented) A system in accordance with claim 8, wherein the first memory and the second memory each comprise a hard disk drive, and wherein both the first and the second portion are played on the PVR.

15. (Currently amended) A method of storing a television program P, the method comprising:
providing a PVR having a first memory device, and a virtual storage management (VSM) logic;

providing a network communicatively connected to a personal computer, the PVR, a second memory device, wherein both the personal computer and the second memory device are remotely attached to the PVR via the network;

identifying the remotely attached second memory device that is not full on the network in communication with the PVR;

storing at least a portion of the program P in the second memory device; and

using the VSM logic of the PVR to track one or more logical addresses of the second memory on the network for storing a plurality of portions of the program P including said portion, to track the total amount of memory storage on the network that is available for storing at least one of said first or said second portion of said television program P, and to track the memory locations of a plurality of portions P(i) of the program P.

16. (Previously presented) A method in accordance with claim 15, wherein said portion is one of i portions P(i) of the plurality of portions, with $i > 1$, and further comprising:

storing a first portion P1 of the program P in the first memory device.

17. (Original) A method in accordance with claim 15, wherein identifying comprises identifying j memory devices that are not full on a network in communication with the PVR, and further

comprising sequentially storing a portion of the program P on a memory device of the j memory devices until the entire program has been stored.

18. (Original) A method in accordance with claim 15, further comprising:

storing all portions of the program P on an archival memory device.

19. (Currently amended) A method of playing back a program P using a PVR, the program stored in at least two portions, each portion stored on a separate memory device, each memory device in communication with the PVR, at least one of the memory devices in communication with the PVR via a network, said network being connected to a personal computer, the method comprising:

using a virtual storage management (VSM) logic of the PVR to track locations of each of said at least two portions stored on the separate memory devices, to track the total amount of memory storage on the network that is available for storing at least one of said first or said second portion of said television program P, and to track the memory locations of a plurality of portions P(i) of the program P; wherein the separate memory devices are located physically separate from each other on the network, and ~~wherein~~ said locations including one or more logical addresses on each of the separate memory devices;

playing back a first portion through a player in the PVR; and

playing back a second portion that is stored on one of the separate memory devices that is located physically separate from the PVR by using a player in the PVR.

20. (Previously presented) A system in accordance with claim 1, wherein the VSM logic is configured as part of said PVR.

21. (Previously presented) A system in accordance with claim 1, wherein, upon detecting the second memory is off-line, the VSM logic is configured to provide an instruction to bring the second memory back on-line.

22. (Previously presented) A system in accordance with claim 8, wherein, upon detecting the second memory to be unavailable for recording said portion of the program P, the VSM means is configured to provide an instruction to bring the second memory back on-line.

23. (Previously presented) A method in accordance with claim 15, further comprising:
detecting the second memory to be off-line; and
providing an instruction to bring the second memory back on-line.

24. (Previously presented) A method in accordance with claim 15, further comprising:
detecting the second memory to be unavailable for recording said portion of the program P;
and
providing an instruction to bring the second memory back on-line.

25. (Original) A system in accordance with claim 1, wherein the PVR is connected to the personal computer via said network.

26. (Original) A system in accordance with claim 8, wherein the PVR is connected to the personal computer via said network.

27. (Original) A method in accordance with claim 15, further comprising:
establishing a connection between the PVR and the personal computer via said network.

28. (Original) A method in accordance with claim 19, further comprising:
establishing a connection between the PVR and the personal computer via said network.